

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 89-104
NPDES NO. CA 0027961

AMENDMENT OF WASTE DISCHARGE REQUIREMENTS, ORDER NO. 88-158

INTERNATIONAL BUSINESS MACHINES
SAN JOSE
SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board), finds that:

1. The Board issued Order No. 88-158 (NPDES No. CA 0027961) to International Business Machines (hereinafter called the discharger) on October 19, 1988. Order No. 88-158 regulates the discharge of extracted groundwaters to either surface waters or for reclamation purposes. Order No. 88-158 identifies groundwater which is to reused as Waste 004.
2. At the time of adoption of Order No. 88-158 it was anticipated that reuse would begin after installation of new treatment facilities, scheduled for December 1991. Due to the continuing drought conditions in Santa Clara County it has become advisable to begin reuse of groundwater earlier than originally intended.
3. By letters dated April 5 and April 27, 1989 the discharger proposed to reuse extracted groundwater for irrigation purposes as follows: 1. Approximately 920,000 gallons per day (GPD) at the the discharger's Cottle Road Facility, which is the source of the groundwater; 2. Approximately 10,000 GPD at the discharger's Almaden Research Center, 650 Harry Road, San Jose; and 3. As yet undetermined amounts for Caltrans roadwork, Santa Clara County Fairgrounds dust control, racetrack preparation and irrigation, and City of San Jose irrigation and street maintenance. The Board finds that this proposal is an appropriate reuse of extracted groundwater and, subject to the conditions of this Order, does not threaten to adversely affect water quality.
4. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986. The Basin Plan contains water quality objectives for the Guadalupe River, South San Francisco Bay, and contiguous surface and groundwaters.

5. The existing and potential beneficial uses of the Guadalupe River and its tributaries include:

- Contact and Non-contact Water Recreation
- Warm Fresh Water Habitat
- Cold Fresh Water Habitat
- Wildlife Habitat
- Fish Migration
- Fish Spawning

6. The existing and potential beneficial uses of South San Francisco Bay include:

- Contact and Non-contact Water Recreation
- Wildlife Habitat
- Preservation of Rare and Endangered Species
- Estuarine Habitat
- Fish Spawning and Migration
- Industrial Service Supply
- Shellfishing
- Navigation
- Ocean Commercial and Sport Fishing

7. Effluent limitations of this Order are based on the Basin Plan, State and U.S. Environmental Protection Agency (EPA) plans and policies, best available treatment economically available (BATEA), and best engineering judgement. The conditions of this Order apply only to the interim reuse of extracted groundwater. Any discharge to surface waters or reuse after completion of treatment facilities will be subject to Order No. 88-158. Interim limits contained in this Order are based on the quality of extracted groundwater.

8. The Basin Plan prohibits discharge of "all conservative toxic and deleterious substances, above those levels which can be achieved by a program acceptable to the Board, to waters of the Basin." The discharger's groundwater extraction and proposed treatment system and associated operation, maintenance, and monitoring plan constitutes an acceptable control program for minimizing the discharge of toxicants to waters of the State.

9. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.

10. The Board has notified the discharger and interested agencies and persons of its intent to issue waste discharge requirements for the discharge and has provided them an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

11. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Amendments of Order No. 88-158

Order No. 88-158 shall be amended as follows:

1. For Finding 6.B., Waste 004, "Not Applicable" shall be deleted and replaced with a flow rate of 1.5 MGD.
2. For Effluent Limitation 4., the phrase "originating from wells on the discharger's property" shall be deleted, the phrase ", involving discharge to land and/or groundwater aquifers" shall be added after "reuse of effluent", and Interim Instantaneous Maximum for Total Volatile Organic Chemicals, "no discharge", shall be deleted and replaced with the followings:

<u>Constituent</u>	<u>Interim Instantaneous Maximum (ug/l)</u>
Freon 113	150
Trichloroethane	40
Trichloroethylene	1
Methylene chloride	1
1,1 Dichloroethylene	5
1,1 Dichloroethane	10
1,2 Dichloroethylene	1
Chloroform	1
Tetrachloroethylene	1

3. A Provision 12 shall be added which states: "Groundwaters reused at sites other than the discharger's Cottle Road facility shall not be discharged to surface waters."
4. A Provision 13 shall be added which states: "The Executive Officer may approve additional specific proposals for reuse, beyond the proposals for reuse at the discharger's Cottle Road and Almaden Research Center facilities, provided that:
 - a. The extracted groundwater supplied by the discharger shall meet the limitations contained in Effluent Limitation 4, as modified by this Order.
 - b. The discharger and/or the end user of the extracted groundwater shall submit a proposal acceptable to the Executive Officer containing specifics on the proposed reuse, including, at a minimum, the source(s) of the extracted groundwater, amounts, method of reuse, location of reuse, and control methods to prevent

runoff.

The end user of reclaimed groundwater shall be responsible for assuring compliance with the specifics contained in a proposal, required by item b. above, for reuse and for any conditions the Executive Officer shall impose as part of an approval of such proposal."

5. The Self Monitoring Program, Part B, Section I.B., Station E-002, the description shall be modified by adding: "Prior to building the air stripper treatment system, at a point in the Waste 004 stream prior to reuse for irrigation."

B. PROVISIONS

1. This Order expires December 31, 1989.

I, Steven R. Ritchie, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on June 21, 1989.



STEVEN R. RITCHIE
Executive Officer